



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/732,736	12/10/2003	Ashish Kundu	JP920030195US1	6678
7590 Frederick W. Gibb, III McGinn & Gibb, PLLC Suite 304 2568-A Riva Road Annapolis, MD 21401		01/24/2008	EXAMINER TIV, BACKHEAN	
			ART UNIT 2151	PAPER NUMBER
			MAIL DATE 01/24/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/732,736

Applicant(s)

KUNDU, ASHISH

Examiner

Backhean Tiv

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/15/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15, 26-30 and 32 is/are pending in the application.
- 4a) Of the above claim(s) 16-25, 31 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 26-30 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Detailed Action***

Claims 1-15,26-30,32 are pending. Claims 16-25,31,33 have been cancelled.

This is a response the Amendment/Remarks filed on 11/15/07. This action is  
made **FINAL**.

***Election/Restrictions***

The applicant elected group I without traverse and has cancelled group II.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for  
all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12,14,26-30,32 are rejected under 35 U.S.C. 103(a) as being  
unpatentable over US Publication 2002/0029185 issued to Tanaka et al.(Tanaka)  
in view of US Patent 6,625,643 issued to Colby et al.(Colby).

As per claim 1, Tanaka teaches a method for monitoring resources of a  
data processing network on behalf of consumer entities within the  
network(Abstract), comprising the steps of: determining monitoring requirements  
of a consumer entity(para.0005); comparing the monitoring requirements of the  
consumer entity with the monitoring capabilities of a plurality of monitoring  
entities to identify at least one monitoring entity having monitoring capabilities  
matching the monitoring requirements of the consumer entity(Abstract,

para.0017); and in response to identifying at least one monitoring entity having monitoring capabilities matching the monitoring requirements of the consumer entity, selecting at least one of the identified monitoring entities and binding the consumer entity to the selected at least one monitoring entity(Abstract, para.0017,0018).

Tanaka does not explicitly teach monitoring resources of a data processing network.

Colby teaches monitoring resources of a data processing network(Abstract, col.3, lines 10-21).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Tanaka to include monitoring resources of a data processing network as taught by Colby in order to allocate enough resources for the data network(Colby, col.3, lines 10-47).

One ordinary skill in the art would have been motivated to combine the teachings of Tanaka and Colby in order to allocate enough resources for the data network(Colby, col.3, lines 10-47).

As per claim 2, the method according to claim 1, all the limitations of which are incorporated herein by reference, wherein binding the consumer entity to the selected at least one monitoring entity comprises establishing a connection between the consumer entity and the selected at least one monitoring entity, sending a description of the consumer entity's monitoring requirements to the selected at least one monitoring entity, and configuring the selected at least one

monitoring entity to perform the required monitoring(Tanaka, Abstract, Fig.1, para.0005,0017).

As per claim 3, the method according to claim 1, all the limitations of which are incorporated herein by reference, wherein the step of comparing requirements with capabilities comprises comparing requirements with a set of currently active monitoring capabilities of each of the plurality of monitoring entities(Tanaka, para.0032).

As per claim 4, the method according to claim 1, all the limitations of which are incorporated herein by reference, wherein the step of comparing requirements with capabilities comprises comparing required monitoring metrics with monitoring metric capabilities of each of the plurality of monitoring entities(Tanaka, para.0031,0032).

As per claim 5, the method according to claim 1, all the limitations of which are incorporated herein by reference, wherein the step of comparing requirements with capabilities comprises comparing a required monitoring period with monitoring period capabilities of each of the plurality of monitoring entities(Tanaka, para.0031,0032).

As per claim 6, the method according to claim 1, all the limitations of which are incorporated herein by reference, wherein the step of comparing requirements with capabilities comprises comparing a required monitoring granularity with monitoring granularity capabilities of each of the plurality of monitoring entities(Tanaka, para.0031,0032).

As per claim 7, the method according to claim 1, all the limitations of which are incorporated herein by reference, wherein the step of comparing requirements with capabilities comprises comparing a required data format for monitoring data with the output data format capabilities of each of the plurality of monitoring entities(Tanaka, para.0038,0039).

As per claim 8, the method according to claim 1, all the limitations of which are incorporated herein by reference, further comprising the steps of: the consumer entity sending a description of its monitoring requirements to a repository; the plurality of monitoring entities sending descriptions of their respective monitoring capabilities to the repository; and storing the descriptions of requirements and capabilities in the repository; wherein the comparing step comprises comparing the descriptions of requirements and capabilities stored in the repository(Tanaka, Fig.4-5 para.0033,0035).

As per claim 9, the method according to claim 8, all the limitations of which are incorporated herein by reference, further comprising the step of creating a binding document describing the monitoring performed for the consumer entity by the selected at least one monitoring entity, and sending the binding document to the repository(Tanaka, Fig.4-5 para.0033,0035).

As per claim 10, the method according to claim 8, all the limitations of which are incorporated herein by reference, wherein the descriptions of monitoring entities capabilities comprise a list of the metrics currently being monitored for each of a set of monitored resources(Tanaka, Fig.4-5 para.0033,0035).

As per claim 11, the method according to claim 1, all the limitations of which are incorporated herein by reference, wherein the descriptions of monitoring entities capabilities comprise currently active monitoring parameters for each monitoring metric(Tanaka, Fig.4-5 para.0033,0035).

As per claim 12, the method according to claim 1, all the limitations of which are incorporated herein by reference, wherein the descriptions of monitoring entities capabilities comprise the output data format for each monitoring metric(Tanaka, Fig.4-5 para.0033,0035).

As per claim 14, the method according to claim 1, all the limitations of which are incorporated herein by reference,, further comprising the step of: using a common sub-expression finder module to identify a monitoring entity having at least one sub-expression in common with the consumer entity, and selecting the monitoring entity having the at least one common sub-expression(Tanaka, Abstract, Fig.1, para.0005,0017).

As per claim 27, the data processing system of claim 26, wherein the monitoring manager comprises: a component for handling registration and de-registration of consumer entities and monitoring entities with a monitoring subsystem; a selector for selecting at least one monitoring entity for a consumer entity; and a connection manager for establishing a connection between the consumer entity and the selected monitoring entity(Tanaka, Abstract, Fig.1, para.0022,0017).

As per claim 28, the method according to claim 26, all the limitations of which are incorporated herein by reference, wherein the monitoring manager

comprises a resource optimizer for determining a set of one or more monitoring entities capable of generating required monitoring data from data measured for a resource(Tanaka, Abstract,para.0038,0039).

As per claim 30, the method according to claim 29, all the limitations of which are incorporated herein by reference, wherein the monitoring manager comprises a set of computer program components distributed across a plurality of data processing apparatuses(Tanaka, Abstract, Fig.1).

As per claims 26,29,32, do not teach or further define over the limitations in claims1-12,14. Therefore claims 26,29,32 are rejected for the same reasons set forth above.

Claims 13,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0029185 issued to Tanaka et al.(Tanaka) in view of US Patent 6,625,643 issued to Colby et al.(Colby) in further view of US Patent 6,154,778 issued to Koistinen et al.(Koistinen).

As per claim 15, Tanaka teaches a method for monitoring resources of a data processing network on behalf of consumer entities within the network(Abstract), comprising the steps of: determining the monitoring requirements of a consumer entity(para.005); comparing the monitoring requirements of the consumer entity with the monitoring capabilities of a plurality of monitoring entities to determine whether any monitoring entities have monitoring capabilities matching the monitoring requirements of the consumer entity(Abstract, para.0017,0018).



Tanaka does not explicitly teach monitoring resources of a data processing network.

Colby teaches monitoring resources of a data processing network(Abstract, col.3, lines 10-21).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Tanaka to include monitoring resources of a data processing network as taught by Colby in order to allocate enough resources for the data network(Colby, col.3, lines 10-47).

One ordinary skill in the art would have been motivated to combine the teachings of Tanaka and Colby in order to allocate enough resources for the data network(Colby, col.3, lines 10-47).

Tanaka in view of Colby however does not explicitly teach initiating a negotiation between the consumer entity and a plurality of monitoring entities to select a best match, relative to other matches based on quality of service parameters, between the monitoring requirements of the consumer entity and the monitoring capabilities of the plurality of monitoring entities.

Koistinen teaches initiating a negotiation between the consumer entity and a plurality of monitoring entities to select a best match, relative to other matches based on quality of service parameters, between the monitoring requirements of the consumer entity and the monitoring capabilities of the plurality of monitoring entities(Abstract, col.2, lines 40-67).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Tanaka in view of Colby to

include initiating a negotiation between the consumer entity and a plurality of monitoring entities to select a best match, relative to other matches based on quality of service parameters, between the monitoring requirements of the consumer entity and the monitoring capabilities of the plurality of monitoring entities as taught by Koistinen in order to enable utility-based multi-category quality of service negotiation in distributed systems(Koistinen, col.1, lines 5-12).

One ordinary skill in the art would have been motivated to combine the teachings of Tanaka, Colby, and Koistinen in order to enable utility-based multi-category quality of service negotiation in distributed systems(Koistinen, col.1, lines 5-12).

As per claim 13, the method according to claim 1, all the limitations of which are incorporated herein by reference,, further comprising the step of: in response to a failure to identify at least one monitoring entity having monitoring capabilities matching all monitoring requirements of the consumer entity, initiating a negotiation between the consumer entity and a plurality of monitoring entities to select a best match between the monitoring requirements of the consumer entity and the monitoring capabilities of the plurality of monitoring entities(Koistinen, Abstract, col.2, lines 40-67). Motivation to combine set forth in claim 15.

### ***Response to Arguments***

The Office withdraws all previous rejection due to applicant's amendments.

Applicant's arguments with respect to claims 1-15,26-30,32 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

**Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Backhean Tiv whose telephone number is (571) 272-5654. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Backhean Tiv  
2151  
1/18/08



JEFFREY PWU  
SUPERVISORY PATENT EXAMINER